

Description of vegetation in several periodically burned longleaf pine forests on the Kisatchie National Forest

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In January 1993, the Kisatchie National Forest and Southern Research Station began a cooperative project on two Ranger Districts to monitor how prescribed burning affects overstory and midstory trees and shrubs and understory woody and herbaceous vegetation in upland longleaf pine (*Pinus palustris* Mill.) forests in Louisiana. Longleaf pine is the dominant species on all four sites and represents 81 to 99% of the total stand basal area. Despite similar overstory vegetation and landform characteristics at all sites, there are distinctly different understory plant communities. However, the most frequently occurring grass on all sites was pinehill bluestem (*Schizachyrium scoparium* var. *divergens* [Hack.] Gould). The most frequently occurring forbs were swamp sunflower (*Helianthus angustifolius* L.) and grassleaf goldaster (*Heterotheca graminifolia* [Michx.] Shinnars). Overstory canopy cover and regrowth of understory woody vegetation reduced the productivity and occurrence of herbaceous plants despite repeated prescribed burning.